

Paper #1

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Serial No.: 09/599,662

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
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Applicant: Anita K. Hopper

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Filing Date: 06/20/00

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**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	1						

**OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)**

KFD	2	Arts, <i>et al.</i> , "Identification of a nuclear export receptor for tRNA" <i>Curr Biol</i> 8:305-314, 1998
	3	Bach, "Some new aspects of isoprenoid biosynthesis in plants - A review" <i>Lipids</i> 30:191-202, 1995
	4	Bartz, <i>et al.</i> , "N6-(Delta 2-isopentenyl)adenosine: biosynthesis in vitro in transfer RNA by an enzyme purified from <i>Escherichia coli</i> " <i>Biochem Biophys Res Commun</i> 40:1481-1487, 1970
	5	Benko, <i>et al.</i> , "Competition between a sterol biosynthetic enzyme and the tRNA modification in addition to changes in the protein synthesis machinery causes altered nonsense suppression" <i>PNAS</i> 97:61-66, 2000
	6	Boguta, <i>et al.</i> , "Subcellular locations of MOD5 proteins: mapping of sequences sufficient for targeting to mitochondria and demonstration that mitochondrial and nuclear isoforms commingle in the cytosol" <i>Mol Cell Biol</i> 14:2298-2306, 1994
	7	Brown, <i>et al.</i> , "Regression of coronary artery disease as a result of intensive lipid-lowering therapy in men with high levels of apolipoprotein B" <i>N Engl J Med</i> 323:1289-98, 1990
	8	Brown and Goldstein, "Multivalent feedback regulation of HMG CoA reductase, a control mechanism coordinating isoprenoid synthesis and cell growth" <i>J Lipid Res.</i> 21:505-517, 1980
	9	Carlson and Botstein, <i>et al.</i> , "Two differentially regulated mRNAs with different 5' ends encode secreted with intracellular forms of yeast invertase" <i>Cell</i> 28:145-154, 1982
	10	Chen, <i>et al.</i> , "PPQ, a novel protein phosphatase containing a Ser <sup>+</sup> Asn-rich amino-terminal domain, is involved in the regulation of protein synthesis" <i>Eur J Biochem</i> 218:689-699, 1993
	11	Chijiwa and Linscheer's (Chijiwa and Linscheer, "Effect of intraluminal pH on cholesterol and oleic acid absorption from micellar solutions in rat" <i>Am J Physiol</i> 246:G492-G499, 1984
	12	Dihanich, <i>et al.</i> , "Isolation and characterization of MOD5, a gene required for isopentenylation of cytoplasmic and mitochondrial tRNAs of <i>Saccharomyces cerevisiae</i> " <i>Mol Cell Biol</i> 7:177-184, 1987
	13	Donald, <i>et al.</i> , "Effects of overproduction of the catalytic domain of 3-hydroxy-3-methylglutaryl coenzyme A reductase on squalene synthesis in <i>Saccharomyces cerevisiae</i> " <i>Appl Environ Microbiol</i> 63:3341-3344, 1997
	14	Endo, <i>et al.</i> , "Beneficial effects of dietary intervention on serum lipid and apolipoprotein levels in obese children" <i>Am J Dis Child</i> 146:303-305, 1992
	15	Endo, <i>et al.</i> , "Oxygenated cholesterol as ligands for cytosolic-nuclear tumor promoter binding protein: yakkasteroids" <i>Biochem Biophys Res Commun</i> 194:1529-35, 1993
	16	Endo, "The discovery and development of HMG-CoA reductase inhibitors" <i>J Lipid Res</i> 33:1569-1582, 1992
	17	Endres <i>et al.</i> , "Role of peroxynitrite and neuronal nitric oxide synthase in the activation of poly(ADP-ribose) synthetase in a murine model of cerebral ischemia-reperfusion" <i>Neurosci Lett.</i> 248:41-41, 1998
	18	Frantz and Gilbert, "A novel yeast gene product, G4p1, with a specific affinity for quadruplex nucleic acids" <i>J Biol Chem</i> 270:20692-20697, 1995
	19	Gibbs and Oliff, "The potential of farnesyltransferase inhibitors as cancer chemotherapeutics" <i>Annu Rev Pharmacol Toxicol.</i> 37:143-66, 1997
	20	Gietz, <i>et al.</i> , "Improved method for high efficiency transformation of intact yeast cells" <i>Nucleic Acids Res</i> 20:1425, 1992
	21	Gillman, <i>et al.</i> , "MOD5 translation initiation sites determine N6-isopentenyladenosine modification of mitochondrial and cytoplasmic tRNA" <i>Mol Cell Biol</i> 11:2382-2390, 1991
	22	Goldstein and Brown, "Regulation of the mevalonate pathway" <i>Nature</i> 343:425-430, 1990
	23	Hinnebusch and Liebman, in <i>The molecular and cellular biology of the yeast Saccharomyces: Genomic dynamics, protein synthesis and energetics</i> eds. Broach, <i>et al.</i> "Protein Synthesis and Translational Control in <i>Saccharomyces cerevisiae</i> " [Cold Spring Harbor Lab Press, Plainview, NY] Vol. 1, pp. 627-735, 1991
KFD	24	Hopper, <i>et al.</i> , "Processing of intervening sequences: a new yeast mutant which fails to excise intervening sequences from precursor tRNAs" <i>Cell</i> 19:741-751, 1980

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**EXAMINER:** Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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## OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

KFD	25	Janssen and Möller, "Elongation factor 1 $\beta$ $\gamma$ from <i>Artemia</i> . Purification and properties of its subunits" <i>Eur J Biochem</i> 171:119-129, 1988
	26	Kinzy, <i>et al.</i> , "Multiple genes encode the translation elongation factor EF-1 $\gamma$ in <i>Saccharomyces cerevisiae</i> " <i>Nucleic Acids Res</i> 22:2703-2707, 1994
	27	Kline, <i>et al.</i> , "N6-( $\Delta^2$ -Isopentenyl) adenosine. Biosynthesis in transfer ribonucleic acid <i>in vitro</i> " <i>Biochemistry</i> 8:4361-4371, 1969
	28	Laten, <i>et al.</i> , "Isopentenyladenosine deficient tRNA from an antisuppressor mutant of <i>Saccharomyces cerevisiae</i> " <i>Nucleic Acids Res</i> 5:4329-4342, 1978
	29	Laufs <i>et al.</i> , "Upregulation of endothelial nitric oxide synthase by HMG CoA reductase inhibitors" <i>Circulation</i> 97:1129-35, 1998
	30	Liu, <i>et al.</i> , "Construction of a GAL1-regulated yeast cDNA expression library and its application to the identification of genes whose overexpression causes lethality in yeast" <i>Genetics</i> 132:665-673, 1992
	31	Lund and Dahlberg, "Proofreading and aminoacylation of tRNAs before export from the nucleus" <i>Science</i> 282:2082-2085, 1998
	32	Martin and Hopper, "Isopentenylation of both cytoplasmic and mitochondrial tRNA is affected by a single nuclear mutation" <i>J Biol Chem</i> 257:10562-10565, 1982
	33	McCloskey and Nishimuta, "Modified Nucleosides in Transfer RNA" <i>Acc.Chem. Res.</i> 10:403-410, 1977
	34	McKnight <i>et al.</i> , "Selection of Functional cDNAs by complementation in yeast," <i>PNAS</i> 80:4412-4416, 1983
	35	Najarian <i>et al.</i> , "DNA Sequence and Transcript Mapping of MOD5: Features of the 5' Region which Suggest Two Translational Starts," <i>Mol. Cell. Biol.</i> 7:185-191, 1987
	36	Nash, "Meeting National Cholesterol Education Goals in Clinical Practice-A Comparison of Lovastatin and Fluvastatin in Primary Prevention," <i>Am J. Cardiol.</i> 78(Suppl. 6A):26:31, 1996
	37	Nasmyth and Tatchell, "The structure of transposable yeast mating type loci" <i>Cell</i> 19:753-764, 1980
	38	Ono <i>et al.</i> , "Nonsense Mutations in the <i>can1</i> Locus of <i>Saccharomyces cerevisiae</i> ," <i>J. Bacteriology</i> 154:1476-1479, 1983
	39	Rasmussen and Culbertson, "Analysis of yeast trimethylguanosine-capped RNAs by Midwestern blotting" <i>Gene</i> 182:89-96, 1996
	40	Rasse-Messenguy and Fink, "Temperature-sensitive nonsense suppressors in yeast" <i>Genetics</i> 75:459-464, 1973
	41	Rine, "Gene overexpression in studies of <i>Saccharomyces cerevisiae</i> " <i>Methods Enzymol</i> 194:239-251, 1991
	42	Rosenbaum and Gefter, " $\Delta^2$ -Isopentenylpyrophosphate: Transfer Ribonucleic Acid $\Delta^2$ -Isopentenyltransferase from <i>Escherichia coli</i> . Purification and properties of the enzyme" <i>J Biol Chem</i> 247:5675-5680, 1972
	43	Rothstein, "Targeting, disruption, replacement, and allele rescue: integrative DNA transformation in yeast" <i>Methods Enzymol</i> 194:281-301, 1991
	44	Sanger, <i>et al.</i> , "DNA sequencing with chain-terminating inhibitors" <i>Proc Natl Acad Sci USA</i> 74:5463-5467, 1977
	45	Sarkar, <i>et al.</i> , "Nuclear tRNA aminoacylation and its role in nuclear export of endogenous tRNAs in <i>Saccharomyces cerevisiae</i> " <i>PNAS</i> 96:14366-14371, 1999
	46	Sarkar and Hopper, "tRNA nuclear export in <i>Saccharomyces cerevisiae</i> : in situ hybridization analysis" <i>Mol Biol Cell</i> 9:3041-3055, 1998
	47	Senapathy and Jacob, "Identification and purification of tRNAs containing N6-(delta 2-isopentenyl) adenosine using antibodies specific for N6-(delta-isopentenyl) adenosine" <i>J Biol Chem</i> 256:11580-11584, 1981
	48	Simos, <i>et al.</i> , "The yeast protein Arc1p binds to tRNA and functions as a cofactor for the methionyl- and glutamyl-tRNA synthetases" <i>EMBO J</i> 15:5437-5448, 1996
	49	Sinensky, <i>et al.</i> , "Differential inhibitory effects of lovastatin on protein isoprenylation and sterol synthesis" <i>J Biol Chem</i> 265:19937-19941, 1990
KFD	50	Sinha <i>et al.</i> , "Polymer support oligonucleotide synthesis XVIII.1.2: use of $\beta$ -cyanoethyl-N, N-dialkylamino-/N-morpholino phosphoramidite of deoxynucleosides for the synthesis of DNA fragments simplifying deprotection and isolation of the final product," <i>Nucleic Acids Res.</i> 12:4539-4557, 1984

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Katharine F. David

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KFD	51	Song, <i>et al.</i> , "Elongation factor EF-1 alpha gene dosage alters translational fidelity in <i>Saccharomyces cerevisiae</i> " <i>Mol Cell Biol</i> 9:4571-4575, 1989
	52	Stansfield, <i>et al.</i> , "The products of the SUP45 (eRF1) and SUP35 genes interact to mediate translation termination in <i>Saccharomyces cerevisiae</i> " <i>EMBO J</i> 14:4365-4373, 1995
	53	Stansfield and Tuite, "Polypeptide chain termination in <i>Saccharomyces cerevisiae</i> " <i>Curr Genet</i> 25:385-395, 1994
		Tanimoto <i>et al.</i> , "Inhibitory activity to protein prenylation and antifungal activity of zaragozic acid D3, a potent inhibitor of squalene synthase produced by the fungus, <i>Mollisia</i> sp SANK 10294" <i>J Antibiot (Tokyo)</i> 51:428-431, 1998
	54	Vincent, <i>et al.</i> , "The yeast translational allosuppressor, SAL6: a new member of the PP1-like phosphatase family with a long serine-rich N-terminal extension" <i>Genetics</i> 138:597-608, 1994
	55	Voet and Voet, in <i>Biochemistry "Lipid Metabolism,"</i> John Wiley & Sons, Inc. Chapter 23 pp.645-657, 1990
	56	Ward, "Single-step purification of shuttle vectors from yeast for high frequency back-transformation into <i>E.coli</i> " <i>Nucleic Acids Res</i> 18:5319, 1990
	57	Whelan <i>et al.</i> , "The <i>CAN1</i> locus of <i>Saccharomyces cerevisiae</i> : fine-structure analysis and forward mutation rates" <i>Genetics</i> 91:35-51, 1979
	58	Woolford and Warner, in <i>The molecular and cellular biology of the yeast Saccharomyces: Genomic dynamics, protein synthesis and energetics</i> eds. Broach, <i>et al.</i> "The Ribosome and Its Synthesis" [Cold Spring Harbor Lab Press, Plainview, NY] Vol. 1, pp. 587-626, 1991
KFD	59	Zoladek <i>et al.</i> , "Mutations altering the mitochondrial-cytoplasmic distribution of Mod5p implicate the actin cytoskeleton and mRNA 3' ends and/or protein synthesis in mitochondrial delivery" <i>Mol Cell Biol.</i> 15:6884-6894, 1995
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